ALBERTA PUBLIC SAFETY SERVICES

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AGENCY INSIGHT

Disaster planning for everyone



In this issue:
Emergency preparedness at the grassroots level

Disaster planning for everyone

This edition of Insight is devoted to helping raise safety consciousness in every nook and cranny in the province. We go from the classroom to the living room to the corporate boardroom in an effort to enlighten readers about the practice of safety. Our aim is to show how simple and practical it can be to prepare for potential disasters that might happen at work or home.

The articles in this issue do much to dispel the notion that emergency preparedness is a doom and gloom affair, practiced by pessimistic people who expect the worst and sit around waiting for it to happen.

Preparing for emergencies is good common sense, and the time and effort it takes to think along practical lines and draw up a plan ends up being time saved when an incident occurs and daily life is disrupted.

How many people actually have a home emergency plan? Grahame Blundell of APSS explains how crucial such a plan really is. On page 11, he explains how to draft a plan and where to look for guidance.

Municipalities are required by law to have emergency plans. Some municipalities have also implemented unique schemes to advance emergency preparedness. We hear from Fort Saskatchewan, where a sophisticated new warning system is in place, and from Strathcona County, where newspapers print safety news.

These days, industry is taking a leading role in safety promotion. Loveena Chera of Dow Chemicals reports on some of the initiatives that are improving communication between industry and the community.

We go to the farm in this issue and meet with Florence Trautman, who, as a member of Women of Unifarm, is doing everything she can to raise hazard awareness among farming families. We also look at the Government of Alberta's Farm Safety Program, which draws in large part upon children to spread the safety message.

Is your job ruining your health? On page 7, Alberta Occupational Health and Safety has some tips for reversing that situation. On page 8, the Alberta Council on Aging informs seniors on how they can learn to live more safely.

Norm Henning of APSS tells us about new guidelines to help school officials plan for emergencies, a vital task given that school buildings are so densely populated with children and staff every school day. On the topic of protecting children, the Canadian Tire Corporation is playing a very active role. Their support of the Stay Alert...Stay Safe program has proven to have very successful results. Jennifer Garland of Canadian Tire reports on page 10.

The message is clear: preparedness is the key to handling emergencies effectively. Preparedness involves training, and here at APSS we are happy to introduce the new Director of our Training Division. A profile of Judith Hughes is included in this issue, along with a schedule of courses. Happy (and safe) reading to you all!

Insight is published quarterly by Alberta Public Safety Services (APSS). The publication aims to inform readers about current developments concerning topics which relate to the mandate of APSS: to prepare for, respond to and follow up on man-made or natural disasters in Alberta. This mandate includes activities in the areas of disaster services and management, as well as the handling, offering and transporting of dangerous goods.

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On the cover: Thor and Petra Ewalds of Edmonton discuss the family emergency plan with their son Timo and daughter Melina. Photo by Rob McCaskill/Alberta Government.

Photo modified in Adobe Photoshop using mosaic filter.

Alberta
PUBLIC SAFETY SERVICES

CANADIAN
FEB 2 4 1992



The Hon. Ray Speaker and Executive Assistant Donna Mastel leave the APSS Training School following a speech by the Minister at the annual APSS staff conference.

Emergency preparedness at the grassroots level

This issue of *Insight* aims to provide Albertans, particularly those who have had little or no contact with emergency preparedness, with some information on how to enhance their knowledge of safety procedures and disaster planning. *Insight* spoke to the Hon. Ray Speaker, Minister of Alberta Public Safety Services, to find out some of his ideas on safety awareness, especially for families.

We usually think of emergencies affecting large numbers of people simultaneously. Yet this issue of Insight focuses on how families and other small groups can prepare for emergencies. Why?

There are two fundamental reasons. First, the family is the building block on which the whole of our society is based. Second, response to any emergency will be much more efficient if a family has already taken basic safety precautions.

Does this mean that the first responders need not bother about families in an emergency?

No, of course not! But if a family has a plan to meet potential emergencies and has been able to use that plan, then at least the authorities can respond carefully and in a measured way, rather than in a "speed at all costs" fashion, because they will know that preliminary steps have been taken by the family to cope with the situation.

We want every family, household if you like, in Alberta to have an emergency plan. Every municipality in Alberta must by law have an emergency plan which has to be kept up to date and practised regularly. I would like every household to have its own emergency plan and to spend just a little time on the Family Day holiday in February rehearsing that plan.

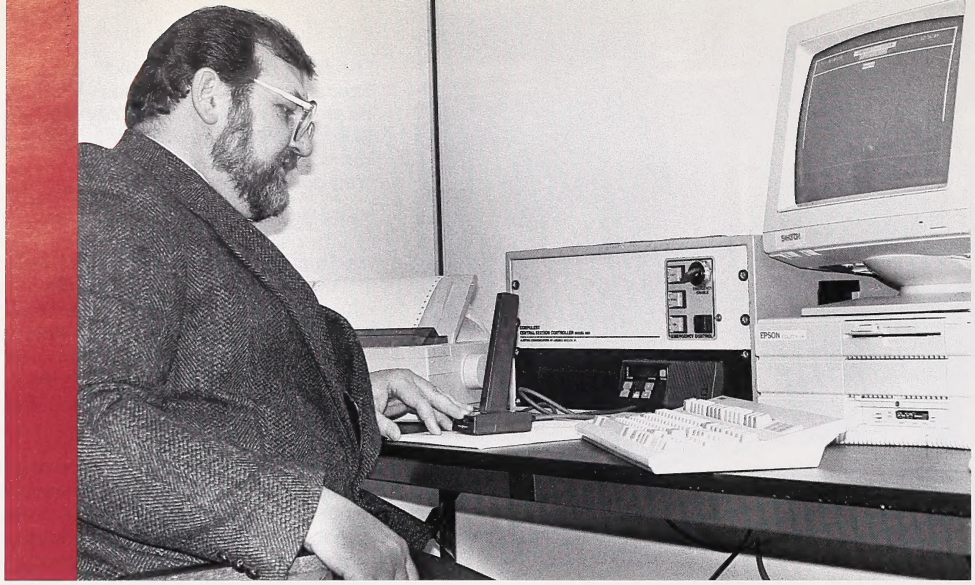
Are you not asking a great deal of every person in the province? The cost would be enormous and the standards would vary wildly. Surely this idea is just not realistic?

On the contrary, the idea is not impractical and it need not cost anyone anything. As for standardization, of course there would be variations, but emergency planning is such a logical and straightforward process that I do not see any major problems involved with this proposal.

All that we want is for every family to review what could happen if the weather or a chemical spill got out of control. For example, people who live on a flood plain should know well in advance how they would prepare for a flood and where they would have to go in case of evacuation. This advance planning costs nothing. As for direct costs, these are negligible. Every family should have an emergency kit containing a few basic needs to keep the family alive, warm and healthy for a few days. In addition there should be enough canned food and water for at least four days. Finally each kit should have a battery operated radio with spare batteries.

You make it all sound very easy. But where can members of the public find out more detailed information about household emergency planning?

In this issue of *Insight*, for a start. I also suggest that people consult with their municipality, collect whatever literature is available on this subject, and find out where the local evacuation centres are located. I also suggest that people phone their APSS District Office for a copy of their booklet called "Helping Yourself Through an Emergency". Everything that families need to know is in this handy publication.



Fort Saskatchewan Disaster Services Director Dave Worman tests the emergency siren system.

COLLEEN DAMKE, FORT SASKATCHEWAN RECORD

Disaster warning capability:
Fort Saskatchewan is on the leading edge

by Dave Worman,
Director of Disaster Services
and
Anita Kuzyk,
Emergency Planning Coordinator

If a disaster such as the 1987 Edmonton tornado ever occurs in Fort Saskatchewan, a municipality neighbouring Edmonton, its residents will be warned by both voice messages and wailing sirens.

Fort Saskatchewan's new Disaster Services Outdoor Warning System, which cost $180,000, is the second of its kind in Canada (the other is located in Sarnia, Ontario). The system utilizes the latest computer and radio technology to warn all residents of pending man-made or natural emergencies, and can be activated from inside the Emergency Operations Centre in the municipal Disaster Services Office, and also from outside the building, if necessary.

The system consists of five battery-operated sirens and the technically advanced "Compulert" computer system that provides continuous control and monitoring. The computer graphics package includes all city maps, the locations and identification of all schools, day care facilities, seniors' centers, reception centers and evacuation routes. The sirens are equipped with quadrant control which enables them to rotate automatically with stops every 90 degrees for repeat of the broadcast warning.

To enhance its efficiency, the system can link up with electronic systems such as traffic lights and public address systems in other buildings.

It is anticipated that Fort Saskatchewan's new warning system will shortly be supplemented by the Edmonton Region Emergency Public Warning System. This will provide Fort Saskatchewan authorities with direct access to all public and private broadcast outlets in the Edmonton region. In case of emergency, a warning message will be transmitted via satellite to all radio, television and cable broadcast outlets in and around Edmonton.

Fort Saskatchewan's team of Anita Kuzyk, Emergency Planning Coordinator and Dave Worman, Director of Disaster Services, are working closely with all agencies involved, such as Alberta Public Safety Services, to utilize these new systems and coordinate the most effective warning system available for the residents of Fort Saskatchewan.

Strathcona County alert to disaster

by Brian Parker
Deputy Chief, Support Services
Strathcona Country

The Peacetime Disaster Planning Committee of Strathcona County, a municipality located just outside of Edmonton, recently conducted a hazard analysis and identified possible major emergencies or disasters that might occur, such as a tornado. A subsequent review of County emergency preparedness measures revealed that the significant challenge facing the department was how to alert as many

people as possible in such an event.

The department's main concern was to find a way to alert people inside large public buildings, such as schools and industrial plants, and to provide them with emergency instructions. In order to bridge the gap in this area of emergency planning, the County investigated the use of early warning and information systems that can be installed and activated inside public buildings.

As a result of these investigations, Strathcona County tested and purchased a plug-in battery backup in-house warning system, called Instalert. The County divided its area into four zones and placed Instalerts in appropriate buildings within each zone. The news media (radio, television and newspaper) were organized as a separate zone and each newsroom provided with an Instalert.

The Fire Department's Emergency Communications Centre can page one or more of the zones at one time. Once the page is activated, a siren tone will be emitted from the Instalert warning system, followed by detailed voice instructions.

Radio and television stations will be given a voice message about the possible danger. Updated news releases will be issued regularly. The news media will be counted on to broadcast a message for the residents living in the afflicted area, repeating the instructions on what they are to do.



COMMUNICATIONS DEPARTMENT, STRATHCONA COUNTY

Toxic Round-Ups give people the opportunity to safely dispose of hazardous toxic wastes. More than 2,000 Strathcona County residents brought materials to this year's Round-Up.

Toxic Round-Ups: Care of the environment begins at home

A report from Strathcona County
by Jocelyn Tennison
Strathcona County
Communications Department

In less than four years, the Toxic Round-Up in Strathcona County has gone from being something of a novelty to an annual event that is changing the way many residents handle hazardous materials.

The idea behind Toxic Round-Up is simple: a community organizes a one-day collection of hazardous household products or containers that would otherwise go into the regular garbage and find their way into a landfill. At the Round-Up, the items are labelled, packed and transported to the Alberta Special Waste Management Corporation's treatment plant at Swan Hills.

Hazardous household materials fall into five general categories — flammable, corrosive, reactive, toxic or environmental contaminants. Although such items make up only about one per cent of the items in a landfill, they are both harmful in themselves and in combination with other materials. Common household items collected at the Round-Ups include pesticides, bleaches, solvents, glue, photographic chemicals, disinfectants, oven cleaners, cosmetics and over-the-counter medications.

Strathcona was one of the eight Alberta communities that held a pilot version of the Round-Up in 1988. Now, there are 84 Round-Ups across the province.

Public awareness and support are at the heart of a successful Round-Up. At Strathcona's 1991 Round-Up, people began arriving at the fire station to leave materials some three hours before the advertised start time.

Volunteers from local industry, business and the health unit worked with staff of Strathcona County. In the spirit of helpfulness, a few members of the community got involved as well when they saw how busy it was.

The event was a big success. More than 2000 cars passed through the four fire stations, an impressive total given that there are only 18,000 households in Strathcona. The Round-Up brought in: 2350 gallons of motor oil, 185 gallons of

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Drayton Valley's *Safety Corner*

by Dave Turner,
Disaster Service Coordinator
Town of Drayton Valley

Since the Edmonton tornado, we have introduced "Did You Know" and "Safety Corner" columns in our local newspaper *The Western Review,* in an attempt to educate the public about disaster procedures and to increase awareness as to the possibility of a disaster in Drayton Valley.

Public ignorance must be eliminated and knowledge increased about the actual risks posed by disasters and the proper response procedures and public evacuation plans that may exist in the event of an emergency.

We have found this program to be very effective in reaching a high number of residents with minimum expense. Some readers make it a practice to clip the articles and tape them to their refrigerators.

The cooperation received from *The Western Review* has been key to the success of the program, as the paper prints the information at no charge.

Toxic Round-Up
continued from page 5

paint, 5 tonnes of paint cans, 741 car batteries and three quarters of a tonne of corrugated cardboard.

The success of the Round-Up naturally has people in Strathcona thinking about what to do next. There is talk of perhaps holding two Round-Ups every year, or eventually having a site open all year. Whatever the direction, it is fair to say that our attitudes on this aspect of community safety are changing permanently.



A Dow employee makes sure a truck carrying chemicals is properly placarded before leaving the site.

DOW CHEMICAL CANADA INC.

Creating links with the community

by Loveena Chera
Communications Department
Dow Chemical Canada Inc.,
Western Canada Division

The Canadian Chemical Producers' Association (CCPA) *Responsible Care* program has set new standards for the chemical industry. Dow Chemical Canada Inc., like other member companies, is committed to the responsible management of chemicals and is involved with a number of projects to ensure that all aspects of the program, introduced in 1986, are implemented by the end of 1992.

Responsible Care consists of codes of practice for distribution, manufacturing, research and development, and hazardous waste management. The program's highly visible portion consists of the Community Awareness and Emergency Response (CAER) and TransCAER initiatives, which have already made a considerable impact on the way the chemical industry operates.

The Community Awareness (CA) portion of the CAER code requires all member companies to have outreach programs. The programs, which target people representing community interests, are aimed at developing information for the community and ensuring that companies hold meetings on a regular basis with interested community groups and officials.

Dow's Western Canada Division, located in Fort Saskatchewan, Alberta, has taken significant steps towards achieving community awareness through its own *Partners in Education* and tour programs. *Partners in Education* has been specifically designed to increase science awareness among local students. The tour program has also been successful in increasing local understanding of Dow's operations.

"It's really important when our visitors to the site tell us they think we're doing some great and innovative things to protect the environment, or when high school students say we've helped make science fun for their class," says Tanya Lebans, Communications Supervisor for Dow's Western Canada Division.

The other side of the CAER code, Emergency Response (ER), deals with emergency planning and preparedness. The codes call for each site to have an up-to-date and operational emergency plan, and to communicate the plan to the community, emergency officials and the media.

The ER program increases safety measures in local communities by keeping close ties to people whose job is to respond in an emergency. Dow provides information sessions for local fire, police and ambulance personnel and keeps them up to date on its emergency procedures.

Dow's emergency response plan is coordinated with the emergency plan of the City of Fort Saskatchewan through the municipality's Disaster Services Department. Dow has strong links with the local RCMP, hospitals and fire services in case a problem ever occurs.

Dave Worman, Director of Fort Saskatchewan Disaster Services, feels the CAER initiative provides an essential link between communities and the chemical industry. "It's a good way to provide a service that will no doubt be vital if an emergency ever warrants its use," he says.

Dow's Western Canada Division is also in the process of implementing an off-site notification system, designed to enhance communication between Dow and people who live close to the site. This initiative will provide early warning if a major chemical release ever occurs.

Terry Leigh, head of the Emergency Procedures Committee at Dow's Western Canada Division, feels it is essential that industry open its doors and take time to communicate with individuals on a one-to-one basis. "People want a better understanding of decisions affecting them and we have to respond," he says.

Like the CAER code, the transportation code of practice, known as TransCAER, has both an internal and external focus. Internally, great effort has been spent over the past few years to ensure that products are handled safely both on and off site. Dow takes an active interest in making sure its products arrive at their destination safely.

Externally, the TransCAER focus is to make sure communities along major transportation routes are prepared to handle an emergency.

Dow is actively involved with the communities of Hinton, Alberta; Canora, Saskatchewan; Dauphin, Manitoba and Kenora, Ontario. Information sessions provided for the local emergency response teams give these communities a better understanding of the chemicals being transported and the proper way to handle them.

CAER and TransCAER emphasize that the best way to avoid accidents is to prevent them, but if an emergency should occur, proper advance preparation is the key to efficient response.



The Workplace Hazardous Materials Information System (WHMIS) helps employees learn how to protect themselves and others from the dangers of hazardous materials.

Is your job ruining your health? Guidelines for a safer workplace

Hazardous materials are those which, either in the short or long term, can cause harm to people, plants, animals or the environment.

Many owners and managers don't realize the risks posed by such substances. They know exposure to hazardous chemicals can cause discomfort, but they don't realize that exposure can be harmful or even cause permanent damage. They mistakenly think exposure which causes rashes, scratchy throats, or burning eyes isn't serious, merely a temporary inconvenience that has to be tolerated as part of the job.

The general attitude seems to be that a little exposure to any chemical or other irritating substance doesn't hurt. People who hold this belief either don't know – or choose to ignore the fact – that long-term exposure to even small quantities can be harmful. In some cases, such as asbestos, it can even be fatal.

A study conducted in 1984 concludes that 9% of the cancer deaths in Canada may have been caused by over-exposure to hazardous materials. This translates into approximately 3600 deaths each year, which is about three times the total number killed annually in job-related accidents.

Prevention is the key to reducing and – hopefully – eventually eliminating deaths from exposure to hazardous materials. Not only is this the best way of dealing with the problem, but it is easier and less expensive in the long run. There are two steps involved:

1) Awareness of the nature and possible harmful effects of all the materials used and present in the worksite.

2) Use of proper precautions to make the work environment safe, including:

 - installing ventilation systems

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Guidelines

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- providing enclosures, such as a paint booth or an exhaust hood
- substituting less harmful materials
- providing suitable personal protective equipment
- developing safe handling and storage procedures

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS (pronounced "WIMISS") legislation came into effect in 1989. WHMIS is a nationwide chemical product identification and labelling system designed to help Canadian employers identify, recognize and control the hazards associated with harmful materials and substances. The three areas covered by the legislation are labelling, Material Safety Data Sheets, and worker education programs.

All hazardous chemical product users, from janitorial services to major chemical manufacturers, will benefit from WHMIS. Not only will it make health and safety information readily available, but it will make it available on many more products.

WHMIS applies to all industries and workplaces in Canada. It is based on a worker's right to know about the dangers faced from hazardous materials. The legislation makes it easier for the user to identify hazardous products by stipulating that certain products be labelled and a Material Safety Data Sheet (MSDS) be prepared and given to users. It also requires employers to make sure their employees are aware of the hazards they face from the products they may come in contact with.

LEGISLATED RESPONSIBILITIES UNDER WHMIS

The supplier of a product or material subject to the WHMIS legislation must stick a standardized label on the product. The supplier must also make up and supply to all users an MSDS listing:

- material identification and use
- hazardous ingredients
- physical data
- fire and explosion hazard
- reactivity data
- toxicological properties
- preventive measures
- first aid measures
- preparation data

THE EMPLOYER, when receiving products covered by the WHMIS legislation, must check that the required supplier labels are in place. If they are not, the supplier must be contacted.

Hazardous materials produced at the workplace for use at the workplace, and those for which supplier labels have been removed accidentally or which have become illegible, must be properly labelled with worksite labels by the employer. A worksite label must be applied when a hazardous material is transferred from the supplier's container to another container. Although there is no specific format for a worksite label, it should give product identification, a reference to the MSDS, and information for the safe handling of the hazardous material.

In addition, employers are required to train their workers to understand the purpose and importance of the information on the labels and the data sheets. The training provided must be up to date, relevant to the business in question, and presented in such a way that the employees can understand and know how to use it. Instruction must cover procedures for the use, safe handling, storage and disposal of the hazardous materials.

EMPLOYEES must learn how to use WHMIS, accept and review information on hazardous materials at the worksite, follow recommended procedures to protect themselves and others, and inform the employer of damaged or missing labels.

For more information about how the WHMIS program can protect Alberta workers, or for details on labelling requirements, call your nearest office of Alberta Occupational Health and Safety.

Article adapted from "Occupational Health and Safety Manual for Small Business", a publication of the Alberta Occupational Health and Safety Heritage Grant Program.

Adjusting to aging: Learning a new set of safety rules

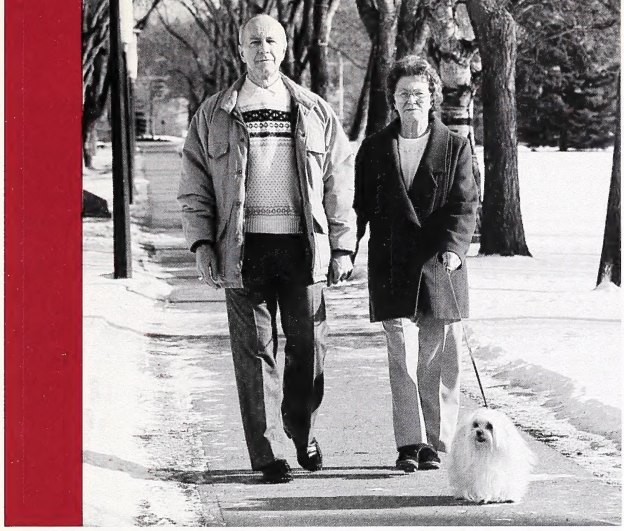
by Chris Bellchamber and Aaron Mann, Alberta Council on Aging

You are 70 years old and you are in the branches of the tree in your backyard battling tent caterpillars. What is wrong with this picture?

Mentally, many seniors feel they are 20 years younger than they really are, but often don't realize it until they experience a problem. Sensory changes that occur as one ages can affect vision, hearing and balance, and can lead to the "wonky knees" syndrome.

Seniors can fall off curbs or ladders much easier than when they were younger, and must therefore walk with greater care than ever before in their lives. The red bricks that are so attractive and which are, in many instances, replacing cement sidewalks, can be deadly for older adults as they form uneven surfaces on which it is relatively easy to trip and fall. Slippery surfaces which result when snow is not removed from sidewalks can also spell disaster for seniors.

Older people must be made aware of their limitations and learn to make adjustments. For example, shoulder checking when driving an automobile may become more difficult as one grows older. The Alberta Motor Association provides driving courses for mature drivers which can help them to adjust their driving



In Alberta, falls are the leading cause of injuries to seniors. That is why seniors must walk with greater care than ever before in their lives.

habits to compensate for this problem.

Plan before it is too late! Lifelong habits can become so ingrained that older people are unaware of them, and how unsafe they can be. The rate of accidental death is three times greater in seniors than it is in younger Canadians. With an aging population, this could reach epidemic proportions.

In Alberta, falls are the leading cause of injuries to seniors. Hip fractures are one of the prime reasons for the institutionalization of older adults. What can be done to prevent this?

There are several resource programs and agencies available to enhance the safety of seniors. Most older people actually know what safety measures need to be followed, but simply need to be reminded of them.

Seniors want to be independent and help themselves. They have the will, knowledge and experience to lead full, active, independent lives. By using resources available to them, seniors can acquire the knowledge to enable them to become their own best safeguard against injury and accidents. The following programs and agencies are here for seniors, and all seniors are invited to make use of their services.

Alberta Council on Aging. 501, 10506 Jasper Avenue, Edmonton, Alberta T5J 2W9. Phone: (403) 423-7781. Provides workshops and information on seniors and safety. A film is also available. A volunteer Senior Consultant will provide an in-service talk in any community in Alberta.

Canada Safety Council. 2750 Stevenage Drive, Unit #6, Ottawa, Ontario. K1G 3N2. Phone: (613) 739-1535. An umbrella organization devoted to safety. It provides a newsletter on safety issues as well as specific information.

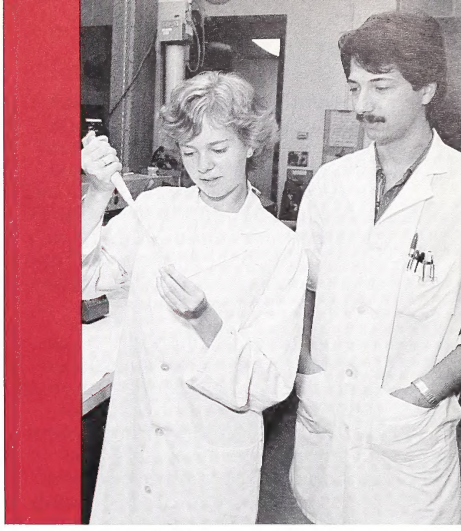
Seniors' Advisory Council for Alberta. 405, 10109 - 106 Street, Edmonton, Alberta T5J 3L7. Phone toll free: 1-800-642-3853, or in Edmonton 427-7876.

Injury Awareness and Prevention Centre. 6-106 Clinical Sciences Building, University of Alberta Hospitals, Edmonton, Alberta T6G 2G3. Phone: (403) 492-6019. Provides workshops and a newsletter.

Community Resources. If you need safety information in your community, try contacting the Home Care Coordinator, Senior's Coordinator, local Health Unit, Police Department or the Royal Canadian Mounted Police Divisions in your area. Local Safety Committees may also be a resource.

Brochure: "Let's Talk about Falls and the Elderly" from the Minister of Supply and Services Canada, 1984 Cat. No. H49-22/6- 1984; ISBN 0-662-53973-7. Regional Communications Branch, Health and Welfare Canada, Room 245, Sinclair Centre, 757 West Hastings Street, Vancouver, B.C. V6C 1A1.

For more information on these and other resource groups, please contact the Alberta Council on Aging.



The new Emergency Preparedness Guidelines for Alberta schools guide school officials in assessing hazards within the school building.

Provincial emergency planners go back to school

by Norm Henning
APSS Planning Officer

Alberta's larger urban school boards recently approached Alberta Public Safety Services with growing concerns about the state of emergency planning in schools. There are over 2000 schools across the province and at any given time approximately 25 to 30 per cent of a municipality's population can be found either working at or attending school. Among school board trustees, there is a sense that the time has come to create comprehensive emergency plans for schools, rather than simply including schools in overall municipal emergency plans.

Alberta Public Safety Services, in conjunction with the Alberta Department of Education, has responded by developing a document entitled Emergency Preparedness Guidelines for Alberta Schools.

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Back to school

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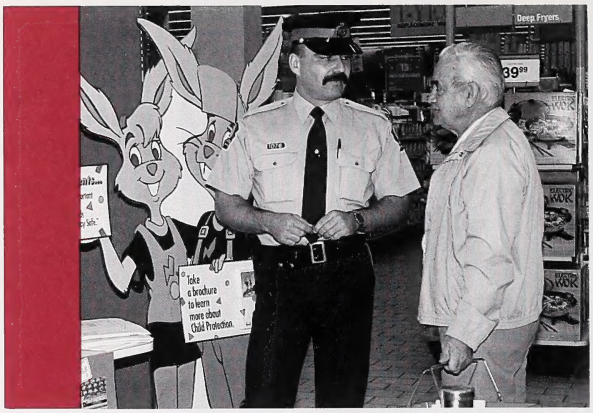
These guidelines have been designed to provide school principals with the latitude they require to tailor their school's emergency plan to the local environment and also to integrate it into the municipality's emergency plan.

The document, which will be distributed to all school superintendents pending ministerial approval, describes in detail how school boards might go about implementing a full-scale emergency preparedness program for potential crises such as explosions, bomb threats, tornadoes or severe weather incidents, earthquakes, power failures and medical emergencies.

Guidelines are suggested for developing policies to support the program. These include appointing a coordinator and an emergency preparedness committee to administer the program and to hold emergency exercises to test and improve the school's emergency plan. Recommendations are provided as to the emergency responsibilities of school superintendents, principals and teachers.

Information about hazard analysis is included in the document, along with advice on evacuation and dispersal, emergency training, drafting and updating of emergency contact lists, and communications procedures to use in times of crisis.

This document has been designed to serve as a guide to comprehensive emergency preparedness and response planning for schools. Though use of the guidelines is voluntary, both Alberta Public Safety Services and the Department of Education strongly encourage school principals to use the guidelines in their emergency planning process.



Constable Ed Willis of the Edmonton Police Service talks to a customer about the program at a recent Stay Alert... Stay Safe day at the Canadian Tire store in the West Edmonton Mall.

CANADIAN TIRE CORPORATION

Safety on the street: Big business helping little kids

by Jennifer Garland
Manager, Child Protection Program
Canadian Tire Corporation

Child protection and safety is everyone's business, and there's no better voice than that of big business when it comes to spreading the message. Canadian Tire is one major corporation that is actively helping government, community organizations, schools and police groups keep kids safe.

Canadian Tire Corporation and its over 410 associate stores nationwide has introduced a Child Protection Program to provide funding and other assistance to child protection organizations, to help them increase the effectiveness of their efforts. For example, financial and other support from the Canadian Tire Child Protection Program enabled the *Stay Alert... Stay Safe* Organization to introduce a national education program to over 16,000 elementary schools across Canada in the fall of 1990.

Stay Alert... Stay Safe is a registered Canadian charity founded in 1987 following the abduction and murder of an 11-year-old girl in Toronto. The organization's mandate is to provide an ongoing, national street-proofing program involving both children and adults.

The program is delivered by police officers and teachers in school classroom sessions and in community group meetings. Endorsed by the Canadian Association of Chiefs of Police, the program provides take-home booklets and features an animated situational video featuring Bert and Gert, the Alert Twins.

Canadian Tire has recognized that as a charitable initiative, *Stay Alert... Stay Safe* needs support at the community level. That is why the company is matching its financial backing of the program with an aggressive promotional campaign at the store level. Customers can expect to see lifesize Bert and Gert displays carrying information on the program, window banners, employee buttons and a promotional video. Many Canadian Tire associate stores work with local police and community groups like Block Parents to host Stay *Alert...Stay Safe* Days at the store.

Community interest in the *Stay Alert...Stay Safe* Program is overwhelming. More than four million booklets and 35,000 teacher resource guides and videos have been distributed to schools and police departments. Some 700 community kits with activities suitable for volunteer leaders have been distributed, and more than 80,000 letters and requests for program information have been received from children, educators, police and other individuals. The partnership is truly providing the formula necessary for the success of any charitable initiative.



Families living near railroads should find out local plans for rail accidents, and incorporate these into the family's emergency plan.

Safety is a family affair

Viewpoint gives you, the reader, a soapbox to stand on and air your views. Start a debate: send your beefs and bouquets to Viewpoint, in care of Insight's editor.

by Grahame Blundell
APSS Director of Communications

Every household should have an emergency plan. A plan is neither complicated nor difficult to design and it need not cost anything to maintain. However, it will give to every family member the assurance that adequate precautions have been taken to ensure the best possible protection for everyone in the house.

Family emergency planning is a matter of a few simple steps. First, conduct a hazard analysis, which is an assessment of possible dangers. One obvious danger is fire, another is a power outage in the middle of a cold spell, another might be flood damage or a tornado. Obviously it is impossible to accurately anticipate every possible event, but, and this is fundamental to all emergency preparedness, a household that is prepared for what can sensibly be anticipated is already better able to respond to the totally unexpected.

The next step is to assemble all the family members and to decide how to deal with the events identified in the hazard analysis. For example, to protect the family from fire, it is necessary to have smoke alarms, fire extinguishers and several alternate escape routes.

The plan should ideally contain a training schedule for practicing evacuation via these routes in daylight and at night.

In case of a power outage or tornado, plan to move into the basement with an emergency kit. This kit, which should accompany the family in every emergency, must contain basic requirements for survival: blankets, water, ready to eat high energy food, a flashlight with spare batteries and a portable battery powered radio with spare batteries.

Consideration should also be given to including in the kit vital family documents such as home ownership records and banking information. This emergency kit must be ready at all times and every family member must know where it is kept.

Other key emergency preparedness pointers to make a part of everyday living include posting emergency telephone numbers near the telephone. The 911 system is not universal and local emergency numbers are listed in the front of the telephone directory.

Remember that in an emergency, the telephone should not be used except to call for emergency help. This is because the phone lines quickly become overloaded. It is vital for everyone that the emergency responders have exclusive use of the phones. Information about the emergency will be broadcast on

Emergency kit items:

Prepare a carry-all in advance with the following items:

- High energy foods
- Liquids
- One change of clothing per person
- Blankets
- Non-prescription medication
- First-aid supplies
- A battery powered radio
- Flashlight and spare batteries.

radio and television. Most municipalities have standing arrangements to use local radio stations to transmit essential information.

There is a wealth of advice available about family emergency planning. Good sources of information include local municipalities and directors of disaster services. Local alderman or councillors can provide the names of the people to call.

APSS carries several booklets on this subject and the regional offices of Emergency Preparedness Canada also have several related leaflets.

The final essential component of family emergency planning is rehearsal. It is no good having a plan and doing nothing about it. Every emergency plan, whether it is for a major city or a small village, has to be rehearsed. This is because each rehearsal uncovers ways to improve the plan.

Since emergency planning is a family affair, a good day to rehearse the family plan, at least in Alberta, is when the family is together at home on Alberta's Family Day holiday, and every year after that on that same day.

IF YOU MUST TRAVEL DURING WINTER STORMS, KEEP A VEHICLE SURVIVAL KIT IN YOUR CAR. HERE ARE SOME SUGGESTED ITEMS:

- blanket or sleeping bag per person
- change of clothing and extra socks, caps, mittens, boots, rain coat
- transistor radio
- flashlight and fresh batteries
- shovel, small sack of sand
- large box of facial tissues
- plastic frost scraper
- pocket knife
- can opener
- matches
- catalytic heater or propane lantern for heat and light
- supply of high caloric, non-perish able food
- compass and maps
- [illegible] aid kit
- [illegible] litre cans with plastic lids to be [illegible] toilet facilities



WOMEN OF UNIFARM

The Honourable Shirley McClellan, Associate Minister of Agriculture, thanks Elizabeth Olsen (far right), president of the Women of Unifarm, and Florence Trautman, the organization's regional director and farm safety coordinator, at the kick-off of the Women of Unifarm's annual Farm Safety Hike, held in June at a farm in Camrose.

Farm safety: Raising hazard awareness to reduce accident rates

by Florence Trautman
Farm Safety Co-ordinator
Women of Unifarm

Agriculture's greatest resource is not land, climate, buildings, equipment, livestock or crops - it is the children on our farms.

Yet children under the age of 14 run a 500 per cent greater chance of being injured on the farm than in any other environment. A farm is in the unique position of being an industrial workplace filled with a variety of dangers, and also a home or a special place to visit. As children cannot simply be kept completely away from this workplace, as is the case in other industries, farm families must identify and manage the many farm hazards.

It is easy to assume that the safe way of doing something is obvious; but it is only because of the farmer's wealth of experience that it seems obvious. For youngsters, everything about safety has to be explained.

The best behaved kids can disobey or forget. Similarly, well-supervised children will occasionally end up where they do not belong, doing what they should not be doing. Leaving a can of pesticide lying about because you assume that a youngster won't play with it can be fatal. The majority of farm chemicals are quite dangerous, and if children get their hands on them, the results can be quite tragic.

Pesticides and other toxic chemicals should be stored in locked cabinets or a shed in their original containers. Empty containers should be triple-rinsed and disposed of as soon as possible at a hazardous waste disposal site. Everyday items such as matches, cleaning products, bug killer, sharp knives and medications can be hazardous and should be stored with care. The Poison Control Centre number should always be posted by the phone. Poisoning seems to be an epidemic in Alberta, and not just on farms - over 12,000 children under the age of 10 were poi-

soned in the province last year (primarily from medicinal products).

Farming is now considered to be the most dangerous occupation in the country. Each year, several thousand farming-related injuries occur in Canada, not because farmers are careless, but because they are desperate - desperate to get the crops off when a storm is coming or desperate because a payment is overdue. The majority of accidents that occur are preventable, through:

- Awareness of how accidents happen
- Elimination of hazards where possible or other types of action where feasible
- Taking a little extra time. That mortgage payment or tractor payment will not be very important if a child is hurt or killed.

For the fifth year, Women of Unifarm is conducting a Farm Safety Program, which encourages farm families to take children around the farm to point out the hazards. It is also essential that they learn proper safety procedures.

While speaking to some school children about farm safety, I asked them what their emergency phone number was and they answered 911. I then realized that from watching the American television show Rescue 911, farm children assumed that their emergency number must be 911. This is not true. Each region in the province has its own number. Some have different numbers for police, fire and ambulance. That is why emergency phone numbers should be posted by the phone. Lives may depend on this information.*

There is a sort of conditioned apathy these days towards farm-related health and safety issues. The root of the problem is essentially lack of awareness and the farm population's reluctance to make an issue of farm safety. The women of Unifarm hope to turn this trend around by encouraging parents to invest in the lives of their children by making safety awareness a part of their lives.

* (Editor's note: See back cover).



Children illustrate the tenets of farm safety: "Never play on an auger" (right) and "Keep little children away from machinery". Both taken from the 1990-91 edition of "A Child's Guide to Farm Safety", produced by Alberta Agriculture with the support of Alberta Power Limited and TransAlta Utilities.

Alberta's farm children:
Writing the book on farm safety

by Bonnie Shulman
Insight Editor

In Alberta, children are the standard-bearers of farm safety information. Many of the programs of Alberta Agriculture's Farm Safety Program are specifically designed to enable them to take an active role in reducing the number of farm accidents. The manager of the Farm Safety Program, Solomon Kyeremanteng, says that their involvement is valuable.

"Farm safety in Alberta is an individual responsibility," Mr. Kyeremanteng says. "There is no legislation that says that a farmer has to be safe. So we have to get people to want to pay stricter attention to safety measures. Since children are very creative and can exert influence on their parents, we try to involve them as much as possible."

One of the initiatives that Kyeremanteng points to as being particularly successful is a booklet entitled *A Child's Guide to Farm Safety*, which has been prepared in part by the children who will use it. Students from across Alberta contributed the essays and posters that illustrate the safety principles revealed through the book's text, games and puzzles. Each year, a completely new version of the book is released.

"The book is very popular," he says. "We print 50,000 copies and every last one is given away to someone who has requested it. Furthermore, in the years since we first started this project, the accident rate among its targeted group, children in the first through sixth grades, has declined dramatically."

The book is just one of the Farm Safety Program's initiatives which draw on the involvement of children. A farm safety campaign launched in March of this year calls on children to place a sticker shaped like a key and emblazoned with the words: *Leaving? Take me too!* on key pieces of farm equipment, to remind parents to shut off their machinery before tending to repairs. According to a recent summary of farm injuries in Alberta, 32 per cent resulted from repairs and maintenance work.

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Alberta's farm children

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Another common denominator between both of these programs is strong support from corporate sponsors. John Deere Ltd. was involved in the *Leaving? Take me too!* project; Alberta Power Limited and TransAlta Utilities sponsored this year's edition of *A Child's Guide to Farm Safety*. Mr. Kyeremanteng builds strong corporate support by providing a product that benefits companies as much as target audiences. "I am a strong believer that if you have a marketable product, you will find a sponsor. Most companies want to be good corporate citizens and if I can provide them with a meaningful and beneficial product that enables them to augment their profile in that way, then they will support the product."

But even a good product backed my major corporations isn't enough to get the job done. Mr. Kyeremanteng believes in the importance of networking. "I keep in constant contact with farm organizations, because the government alone can't accomplish everything," he says. "In the area of safety promotion, especially, it pays to find all the help you can get.

"Farm organizations tap the pulse of their members more than a public servant can, they relate to their membership in a way that I can't. And since most organizations want to be beneficial and show their members that they are doing something in their interest, why not capitalize on that goodwill and have them help me inform people about farm safety?

"That's what I did with the *Leaving? Take me too!* campaign. I decided to let the Alberta Women's Institute, not Alberta Agriculture, handle distribution duties to schools in rural Alberta. These women know the school principals and teachers, and therefore they have more influence. They did in fact do a superb job. Now they're phoning me for more decals and stickers."

According to Mr. Kyeremanteng, "The less bureaucratic we make the whole business of farm safety, and the more people we can involve in information dissemination, the more success we're bound to have."

ER'91 Conference Update

The third Emergency Response conference, organized by the Major Industrial Accidents Co-ordinating Committee (MIACC) was held in Calgary at the end of May. There were 304 delegates in attendance, a large majority of whom rated the conference very highly for its organizational quality and achievement of its objectives.

The Hon. Ray Speaker, Minister of Alberta Public Safety Services, presented the keynote address to open the conference on behalf of Premier Don Getty of Alberta, the Conference Patron. His worship Al Duerr, Mayor of Calgary, addressed the delegates in a lunchtime speech, as did Eric Newell, President and CEO of Syncrude Canada and R.H. Ballantyne, President of the Railway Association of Canada. John E. Feick, Senior Vice-President of NOVA Corporation and President of Novacor Chemicals, Petrochemical Division, was the guest speaker at the conference banquet.

Distinguished specialists from industry and government sectors in 11 different countries presented papers. Several of the speakers were members of the Alberta Public Safety Services staff.

Exhibit displays proved to be immensely popular with delegates. These included the Rohm and Haas safety train, safety vehicles from the Celanese and Dow Corporations and the EWS-PAQ-MOS Emergency Weather Tower.

Mr. Ken Hughes, federal MP for McLeod, Alberta, closed the conference on Thursday, May 30. The following day, 26 delegates visited the Alberta Special Waste Management Corporation's hazardous waste disposal facilities at Swan Hills. Also that day, Alberta Public Safety Services held an Emergency Site Management Workshop and the Southern Alberta Institute of Technology presented a workshop entitled "Training the Trainer for Dangerous Goods".

The next ER conference will be held in late spring 1993, in St. John, New Brunswick.



Recent Acquisitions in the Library:

A Selected Bibliography of Materials Available from the Alberta Public Safety Services Library

Compiled by Teresa Richey, APSS Librarian

To borrow material listed, send an interlibrary loan request form to Alberta Public Safety Services Library (AEPS), 10320-146 Street, Edmonton, Alberta, Canada, T5N 3A2. Materials located in the Coordination and Information Centre, at our Training School, the Government Emergency Operations Centre or our Reference Collection cannot be borrowed but can be referred to in the Library.

Aguirre, B., et. al. Saragosa, **Texas tornado May 22, 1987: An evaluation of the warning system.** College Station, Texas : Hazard Reduction and Recovery Center, 1988. Various paging.
QC 959 .U6 A38 1988, MAIN LIBRARY

The report centres around warning systems and their effectiveness given existing community support structures. An evaluation of severe weather warning procedures is given in light of a post disaster survey given to residents after the Saragosa tornado. Includes bibliography.

Benveniste, Guy. **Mastering the politics of planning: crafting credible plans and policies that make a difference.** San Francisco : Jossey-Bass, 1989. 314 p.
HD 30.28 .B454 1989, STAFF

A complete book of planning that has applications far beyond the field of planning practices. Especially pertinent in the area of emergency response planning where conflicting political agendas and jurisdictions abound. The practical aspects of emergency planning are not the centre of this book. Rather, the essence is the mind frame of good planning resulting in credible plans that are supported, on course and usable in the uncertain future. A refreshing approach to planning that is anything but dry. Includes index. Bibliography p. 287-307.

Douma, John. **Transportation of dangerous goods in Canada: a practical guide to the law.** Toronto : Butterworths, 1990. 127 p.
KE 3763 .D68 1990 c.1, MAIN LIBRARY

This work was developed as a guide to dangerous goods legislation in Canada that will help individuals and companies comply with the law. Outlines the common law basis of dangerous goods control in Canada and leads the reader through the current federal, provincial and territorial Acts. Also provided is a summary for compliance and a discussion of due diligence and when it can be used as a defence. Sample forms are provided. Includes index.

Fennell, Desmond. **Investigation into the King's Cross Underground fire. London** : The Department of Transport, 1988. 247 p.
HE 4381 .F46 1988, MAIN LIBRARY

Gordon, Steven I. **Computer models in environmental planning. New York** : Van Nostrand Reinhold, 1985. 222 p. HC 79 .E5 G655, MAIN LIBRARY
Includes bibliographic references and index.

LaValla, Rick, et. al. **Community emergency management: development and strategies. Olympia, Wash.** : Emergency Response Institute, nd. 248 p.
HV 553 .U6 L382, MAIN LIBRARY

LaValla, Rick, et. al. **Blueprint for community emergency management: a text for managing emergency operations.** Revised edition. Olympia, Wash. : Emergency Response Institute, 1989. 552 p.
HV 553 .U6 L382 1989, MAIN LIBRARY

Palm, Risa I. **Natural hazards: an integrative framework for research and planning. Baltimore :** John Hopkins University Press, 1990. 184 p.
GB 5014 .P35 1990, MAIN LIBRARY
Includes bibliography and index.

Potential health hazards of existing chemicals. B.G. Chemie. Heidelberg : Springer-Verlag, (Toxicological Evaluations 1). 1990. 341 p.
RA 1199 .T678 1990, MAIN LIBRARY
Includes index.

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Bibliography
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Public policies for environmental protection. Edited by Paul R. Portney. Washington, D.C. : Resources for the Future, 1990. 308 p.
HC 110 .E5 P83 1990, MAIN LIBRARY
Includes bibliographic references and index.

Safety in hazardous wastes. Compiled by Sonia Withers. Luxembourg : Office for Official Publications of the European Communities, 1987. 95 p.
T 55.3 .H3 S23 1987, MAIN LIBRARY

Tornado: a report. Edmonton and Strathcona County July 31st 1987. Alberta Public Safety Services. [Edmonton : Alberta Public Affairs Bureau], [1991]. 187 p.
HV 636 1987 .T671 1990 c.1,2, MAIN LIBRARY
Includes bibliography.

Wenger, D., et. al. **Disaster beliefs and emergency planning.** College Station, Texas : Hazard Reduction and Recovery Center, 1985. 273 p.
HV 553 .W46 1985, MAIN LIBRARY
Includes bibliography and index.

Wenger, D., et. al. **It's a matter of myths: An empirical examination of individual insight into disaster response.** College Station, Texas : Hazard Reduction and Recovery Center, 1975. p. 33-46.
HV 553 .W46 1975, MAIN LIBRARY
Reprinted from: Mass Emergencies, 1(1975) 33-46; Includes bibliography.

Make a note...

HAZARDOUS MATERIALS MANAGEMENT TRAINING

The Northern Alberta Institute of Technology (NAIT) and the Southern Alberta Institute of Technology (SAIT) offer the following hazardous materials management courses.

WHMIS Course for the Trainer. A three-day course providing an in-depth explanation of the legislation for the Workplace Hazardous Materials Information System (WHMIS). (NAIT & SAIT)

The Practical Application of WHMIS at the Worksite. An 8-hour course concerning the responsibilities of employers and employees for the Workplace Hazardous Materials Information System. (NAIT &SAIT)

The Transportation of Dangerous Goods Instructors Certification Course. This five-day course gives instructors an in-depth look at the provincial Transportation of Dangerous Goods Control Act and Regulations. (NAIT & SAIT)

Transportation of Dangerous Goods and the Workplace. A one-day certification training course in the transportation of dangerous goods for persons involved in the actual handling, offering for transport or transporting of dangerous goods.

Hazardous Waste Regulations for the Trainer. A three-day course which provides an in-depth knowledge of the different legislation concerning hazardous waste. (SAIT ONLY)

Hazardous Waste and the Workplace. An eight-hour program to instruct personnel responsible for handling waste at the worksite. (SAIT ONLY)

Loss Management I, II and III. Seminars are based on modern loss management practices providing job and site related skills. The seminars run for five days and include hands-on workshops. (SAIT ONLY).

In addition to the above courses, NAIT and SAIT will tailor and deliver on-site courses to your specifications. For more information, phone Harold Hayter at NAIT (471-7584) or Eric Theisen at SAIT (284-7134).



ANNUAL MIACC MEETING

November 5-7, 1991. The Major Industrial Accidents Co-ordinating Committee will be meeting at the Westin Hotel in Ottawa, Ontario. Members of the media are invited to attend. The theme will be "Developing standards and processes for public safety". The luncheon speaker on November 6 will be Mayor Bernard Gagnon of St. Basile-le-grand, Quebec, site of a major warehouse fire that involved PCBs. Contact Bette Bowyer at (613) 990-1133.

1991 ANNUAL CONFERENCE

National Coordinating Council on Emergency Management
November 10-12, 1991.
Annual conference and exhibit at the Westin Hotel in Kansas City, Missouri. The conference will feature case studies of Louisiana floods and Kansas tornadoes. For more information, contact the NCCEM headquarters at (703) 533-7672.

PARTNERS IN PROTECTION SYMPOSIUM

Jasper, Alberta, September 27-30, 1992. This symposium will address the issue of wildfire in wildland-urban interface. For more information, contact Partners in Protection, P.O. Box 249, Onoway, Alberta T0E 1V0.



Judith Hughes confers with her secretary Joanne Ebertz.

MAY FU

The APSS Training School: A new captain at the helm

Many of our readers have already attended a course or two at the APSS Training School in Edmonton, or have taken an extension course in their own community. The Training Division of APSS, which runs the Training School and most APSS courses, is now run by a newcomer to APSS. We'd like to introduce you to her.

Judith Hughes has been involved in adult education virtually all her professional life, most recently at Athabasca University, where she served as Director of Tutorial Services and Special Programs. She came to Athabasca seven years ago from Queen's University in Kingston, Ontario, where she earned a master's degree in education and conducted educational research for three years. She joins the Training School just when the moment is right to enhance training activities so as to address the rapidly growing demand for all facets of emergency preparedness training and education.

Judith joined APSS with a definite intention to enhance her involvement in community responsive educational activities. "I think that there is a great opportunity at APSS to concern ourselves with community responsiveness, as was the case for me at Athabasca University. I hope I will be able to use a lot of the distance education skills that I used at the university, only in a more specific way here, with the advice and support of APSS experts.

"At Athabasca, I was involved in inter-institutional cooperative agreements. The same will be true for me at APSS, because no single institution can be all things to all communities. The best way for APSS to meet the training needs of all the communities is if we cooperate with other institutions." She sees the agency working with universities, colleges, the five education consortia in Alberta and others to tap into educational technology hardwares and expertise within the educational and training sector.

"The challenge for me as Director of Training, from a personal growth point of view, is to expand upon and apply my interest in adult education and access. I am completing a PhD in Educational Administration, and my area of interest is, in fact, access policy."

Since her arrival at the APSS Training School, discussions have been ongoing as to the goals of the Training Division. The Division is developing a mission statement which revitalizes its intentions to be responsive to community groups as defined by the APSS mandate, to serve rural and urban Albertans, and to apply the most current and appropriate teaching methods in all courses.

"The emphasis will be upon achieving excellence in our training and educational activities," says Judith. "We also intend to provide opportunities for our course materials to be examined and reviewed by experts in the field, both within and outside APSS. The evaluation process will be an ongoing one," she adds.

"In terms of community responsiveness, including the APSS community, we're interested in participating with community groups and industry to make sure we keep abreast of changing needs in the community and are in a position to respond, in a timely and creative manner, to those changing needs.

"I really am quite delighted to have joined the APSS team. I am most impressed with the commitment and expertise of the agency's staff, and I strongly believe that our training staff represents a valuable resource to be applied to achieving APSS goals."

Staff Matters

George Hennecke has been appointed Senior District Officer, Edmonton, with Alberta Public Safety Services (APSS). George joined APSS in 1985 as a Training Officer and was instrumental in the development of the Emergency Site Management Course.

Ian McConnell has joined APSS as a Co-ordination and Information Officer. A native of Liverpool, England, Ian has over 25 years experience in heavy chemical and petroleum industries.

Judith Hughes is the new Director of Training at APSS. (See story on this page).



Acetone

Acetone is a chemical so widely used it can often be found in a lady's purse. It is the main ingredient in both nail polish and nail polish remover, and serves as an excellent solvent for many organic compounds such as fat, oil, waxes, resin, rubber, varnishes and paint.

This clear, colorless, highly flammable, volatile liquid has a sweetish, mint-like odor. Small quantities of acetone are produced in a healthy human body and more so in diabetic patients. Industrially, this chemical was originally obtained by the destructive distillation of wood. Nowadays, it is produced by oxidation of various alcohols.

Acetone is normally stable when stored in closed containers, but will react violently with oxidizing agents such as nitrates, perchlorates and permanganates. Ignition occurs on contact with some compounds, such as activated carbon. A potentially explosive reaction can also occur if the product is contaminated with concentrated sulphuric acid, hydrogen peroxide, bromine, sulphur dichloride, chromic anhydride, bromine trifluoride and chromyl chloride.

Acetone is widely used in the chemical process industry and is also used in the production of lubricating oils, in rubber manufacturing, in chloroform production and in the dyeing and celluloid industries. As a solvent, acetone is used to store acetylene gas as well as to stabilize the product in its container. Because of its volatility, it is used as a fast-drying cleaning agent for laboratory precision equipment.

Subjects exposed to 500 ppm of acetone will be aware of odour but exhibit no ill effect. Inhalation of higher concentrations of acetone vapour will irritate the respiratory tract and cause a headache. Concentrations above 12,000 ppm depress the central nervous system and cause dizziness, vomiting and muscular weakness. In such cases, the subject should be immediately removed to fresh air.

Acetone is also a severe eye irritant which damages the conjunctiva. Due to its defatting effect, it causes mild dermatitis following prolonged skin contact. In both situations, the eyes or the affected skin area should be flushed with copious amounts of water immediately, for at least 15 minutes. Prompt medical treatment should be followed in all cases of acetone exposure.

In spite of all the health hazards of acetone, its major hazard is flammability. With its flash point (closed-cup) of -17 degrees Celsius, the explosive limits in air of 2.6 per cent to 12.8 per cent and its high volatility, acetone poses a fire and explosion risk. Alcohol foam, dry chemical or carbon dioxide should be used in case of an acetone fire. Carbon dioxide and carbon monoxide are combustible products; therefore a self-contained breathing apparatus (SCBA) with a full facepiece operated in a positive-pressure mode should be worn in fire fighting. Acetone vapour is heavier than air and may travel to a low lying source of ignition resulting in flash back. Therefore, all possible ignition sources should be removed from the spill site.

Acetone should be stored in a closed carbon steel container, in a cool, dry, well-ventilated area away from sources of ignition and strong oxidizers. In the event of a major spill or leakage of acetone, all sources of ignition should be removed immediately and adequate ventilation provided. Inert materials such as sand and earth are used to contain and absorb the product. Non-sparking tools must be used when cleaning up the spill and covered containers should be used to carry the waste.

The Transportation of Dangerous Goods Regulations classify acetone as a class 3.1 flammable liquid with a product identification number of UN1090, belonging to packing group II. Class 3 flammable liquid labels or placards should be used when transporting the product. Special Provision 99 - "no person shall offer for transport or transport this product, substance or article on a passenger ship" - applies to this product.

1991-1992 Course Schedule Alberta Public Safety Services Training School

Sept. 10-12

#9107 Municipal Disaster Services Program Management

Sept. 16-17

#9111 Dangerous Goods Carriers & Shippers

Sept. 18-19

#9108 Disaster Social Services

Sept. 30 - Oct. 3

#9109 Emergency Site Management

Sept. 30 - Oct. 3

#9110 Emergency Public Information Officers

Oct. 22-24

#9112 Disaster Health Services Seminar

Nov. 4-8

#9113 Rescue Leaders

Nov. 18-21

#9114 Emergency Site Management

Nov. 18-21

#9115 Emergency Public Information Officers

Nov. 22

#9115A Emergency Public Information Officers for Public Affairs Bureau

Nov. 27-28

#9116 Disaster Social Services

Dec. 3-5

#9117 Special Indian Bands Program Management

Jan. 20-23

#9118 Emergency Site Management

Jan. 20-23

#9119 Emergency Public Information Officers

Feb. 11-13

#9120 Disaster Health Services Seminar

Feb. 18-20

#9121 Municipal Disaster Services Program Management

March 2-6

#9122 Rescue Leaders

March 18-19

#9123 Disaster Social Services

For further information, contact:

Judith Hughes

Director of Training
Alberta Public Safety Services
10320 - 146 Street
Edmonton, Alberta T5N 3A2

(403) 422-0346

We ask you

Each issue of *Insight* magazine is dedicated to exploring diverse aspects of a specific theme related to the mandate of Alberta Public Safety Services. We are now in our third year of publication, and we're eager to find out how you feel about us and how we can continue to keep you well informed in the future.

Please take a few moments to drop us a line. The address is:

Insight Editor
Alberta Public Safety Services
10320 146 Street,
Edmonton, Alberta T5N 3A2.

Which subjects or themes would you like to see covered in future issues?

Would you like to be put on our list of potential contributors, and if so, which subject are you most comfortable in writing about?

Do you know of anyone who might like to receive *Insight* and does not currently do so?

Would you consider writing a Viewpoint article about your personal perspective on a safety or dangerous goods related issue?

Freelance journalists who might like to carry out an assignment, please contact the editor at the above address.

Thank you for your participation.

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911 is not for everybody

We've said it a number of times in this issue, but it's worth repeating: 911 emergency telephone service does not extend to all parts of Alberta. Only the following six municipalities have 911 service: Fort McMurray, Edmonton, County of Strathcona, Red Deer, Calgary and Lethbridge. If you dial 911 from outside these areas, your call will be answered by an AGT operator who will strive to get help to you, but it is much faster to directly dial the emergency responders in your area. Look in the front of your municipal telephone directory for the key seven-digit numbers, and paste them on your telephone.

An implementation and cost study for a province-wide 911 service is presently being conducted by Oldham Engineers. A report will be available to the Alberta government later this year.

ALBERTA PUBLIC SAFETY SERVICES
AGENCY INSIGHT